



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,285	09/22/2005	Hirofumi Hosokawa	KAW-0059	1887

23413 7590 12/11/2008  
CANTOR COLBURN, LLP  
20 Church Street  
22nd Floor  
Hartford, CT 06103

EXAMINER
----------

MARC, MCDIEUNEL

ART UNIT	PAPER NUMBER
----------	--------------

3664

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

12/11/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

usptopatentmail@cantorcolburn.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/550,285	<b>Applicant(s)</b> HOSOKAWA ET AL.	
	<b>Examiner</b> MCDIEUNEL MARC	<b>Art Unit</b> 3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

1. The application filed on 09/22/2005 has been examined. Claims 1-11 and 13-21 are pending.

### *Specification*

2. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to “a single paragraph” on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as “means” and “said” should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, “The disclosure concerns,” “The disclosure defined by this invention,” “The disclosure describes,” *etc.* There are too many indentations, and the abstract is replete with the word “means”. Also the abstract should not be a copy of the claim.

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 4-7, 9-11, 13, 16-17 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (US 6140788).

As per claims 1 and 6, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot having a *robot simulation device* (see Fig. 2, element 10 has been considered a simulation device), *comprising of an input device, a display, a central computer, computing programs, an output device of teaching programs* (see Fig. 2 and col. 3, line 37 – to – col. 4, line -37, particular the keyboard, the LCD and the software has been considered as computing program and teaching program), *and following means to simulate whether the robot can transfer an object in a working space where obstacles are located, without any interference in said working space* (see col. 6, lines 4-19): (1) *a two-dimensional display having coordinate axes* (the LCD of Watanabe et al. has been considered having 2D), (2) *a means to display said obstacles, said working space, a moving robot and said object transferred by said robot, on said display* (the CPU of Watanabe et al. has been considered as means of displaying obstacle), (3) *a means to interpolate a path by designating path points of a central point of said moving object* (see col. 8, lines 27-36), (4) *a means to display a path wherein said object is moved in said working*

Art Unit: 3664

*space, and (5) a means to display an interference region of said path and said obstacles (see Fig. 2, col. 6, lines 4-19 and col. 8, lines 27-36); teaching a motion of movable part of the robot to the robot (see col. 6, lines 4-19, particularly the program path being responsible for teaching the robot).*

As per claims 4 and 16, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein said two-dimensional display displays a horizontal plane or a vertical plane of said working space (see Fig. 6).*

As per claims 5 and 17, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein said obstacles and said working space are displayed by a polygonal form and/or a circular form (see Fig. 6 and col. 8, lines 27-36).*

As per claims 6 and 18, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein said path of said moving object is calculated by designating a departure point and a destination point of said robot on said display (see col. 8, lines 27-36, wherein point Q has been considered as travel point).*

As per claims 7 and 19, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein a route and said path of said moving object is further calculated by designating a departure point and a plurality of destination points of said object on said display (see Fig. 6).*

As per claims 9 and 21, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein said output device outputs at least dimensions of said robot, said*

Art Unit: 3664

*path of the moving robot, said speed of the robot according to data which is achieved by a simulation (see Fig. 5, wherein element S9 has shown evidence speed of the robot..).*

As per claim 10, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein the simulation device further teaches a motion of movable part of the robot* (see Fig. 5).

As per claim 11, Watanabe et al. 6140788 teaches a system and an associated for controlling a robot *wherein said robot is a scalar type robot and said object is a sheet like plate* (see col. 6, lines 4-19 and col. 8, lines 27-36, wherein having a sheet like plate falls under design choice, for the object could be any thing).

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

Art Unit: 3664

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 2, 3, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 6140788) in view of Ohta (US 20050096136).

As per claims 2 and 14, Watanabe et al. 6140788 teaches essential feature substantially as claimed including, but fail to teach *a means of measuring and displaying traveling time of said object and said robot, and a means of displaying a moving picture of said path of said moving object.*

Ohta 20050096136 A1 teaches a traveling time calculation program which equates to *a means of measuring and displaying traveling time of said object and said robot, and a means of displaying a moving picture of said path of said moving object* (see Fig. 3B and 7).

It would have been obvious to a person of ordinary skill in the art the time of the invention to modify the robot type of Watanabe et al. with the traveling time calculation of Ohta, because this modification would have enhanced Watanabe's et al. teaching by displaying the traveling time of a moving picture, thereby improving the efficiency and the reliability of the robot simulation device and program.

As per claims 3 and 15, Watanabe et al. teaches a system and an associated for controlling a robot *wherein a means of calculating traveling speed of said object and said movable portion of said robot* (see Fig. 5).

Art Unit: 3664

8. Claims 8 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (US 6140788) in view of Rosenberg et al. (US 6,028,593).

As per claim 8 and 20, Watanabe et al. 6140788 teaches essential feature substantially as claimed including *wherein a region where said robot is unable to transfer an object is calculated* (it is known that industrial robot contains program/software to able and enable transfer), but fail *displayed by designating a boundary of a movable region of said robot*.

Rosenberg et al. teaches *displayed by designating a boundary of a movable region of said robot* (see col. 49, lines 12-16).

It would have been obvious to a person of ordinary skill in the art the time of the invention to modify the robot type of Watanabe et al. with the computerized system of Rosenberg et al., because this modification would have enhanced Watanabe's et al. teaching by introducing a set of boundaries, thereby improving the efficiency and the reliability of the robot simulation device and program.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited documents are of general interest.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to MCDIEUNEL MARC whose telephone number is (571)272-6964. The examiner can normally be reached on 6:30-5:00 Mon-Thu.



Art Unit: 3664

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi Tran can be reached on (571) 272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**/McDieunel Marc/**  
Examiner, Art Unit 3664

Sunday, December 07, 2008

**/KHOI TRAN/**  
Supervisory Patent Examiner, Art Unit 3664